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CURRENT SERIAL RECORDS

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WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
UTAH

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE,
and
STATE ENGINEER of UTAH

In cooperation with U.S. Forest Service, Bureau of Reclamation,
Utah Fish and Game Dept., Utah Agricultural Experiment Station,
U.S. National Park Service, U.S. Geological Survey; and other
Federal, State, and private organizations.

||||||| AS OF |||||
JAN. 1, 1965

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

To Recipients of Water Supply Outlook Reports:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from advance estimates of the streamflow.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, up to 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1400 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

Streamflow forecasts are obtained by a comparison of total or maximum snow accumulation, as measured by snow water equivalent, to the subsequent spring and summer or snowmelt season runoff over a period of years. The snow water equivalent measured in selected snow courses provides most of the index to the streamflow forecast for the following season. More accurate forecasts are usually obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast procedure. Early season forecasts assume average climatic conditions through the snowmelt season.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions. Soil Conservation Service Reports may be secured from Soil Conservation Service, 511 N.W. Broadway - Room 507, Portland, Oregon 97209.

PUBLISHED BY SOIL CONSERVATION SERVICE

<u>REPORTS</u>	<u>ISSUED</u>	<u>LOCATION</u>	<u>COOPERATING WITH</u>
RIVER BASINS			
WESTERN UNITED STATES	MONTHLY (FEB.-MAY)	PORTLAND, OREGON	ALL COOPERATORS
BASIC DATA SUMMARY	OCTOBER 1	PORTLAND, OREGON	ALL COOPERATORS
STATES			
ALASKA	MONTHLY (MAR.-MAY)	PALMER, ALASKA	ALASKA S.C.D.
ARIZONA	SEMI-MONTHLY (JAN.15 - APR.1)	PHOENIX, ARIZONA	SALT R. VALLEY WATER USERS ASSOC. ARIZ. AGR. EXP. STATION
COLORADO AND NEW MEXICO	MONTHLY (FEB.-MAY)	FORT COLLINS, COLORADO	COLO. STATE UNIVERSITY COLO. STATE ENGINEER N. MEX. STATE ENGINEER
IDAHO	MONTHLY (JAN.-JUNE)	BOISE, IDAHO	IDAHO STATE RECLAMATION ENGINEER
MONTANA	MONTHLY (JAN.-JUNE)	BOZEMAN, MONTANA	MONT. AGR. EXP. STATION
NEVADA	MONTHLY (JAN.-MAY)	RENO, NEVADA	NEVADA DEPT. OF CONSERVATION AND NATURAL RESOURCES DIVISION OF WATER RESOURCES
OREGON	MONTHLY (JAN.-JUNE)	PORTLAND, OREGON	OREG. STATE UNIVERSITY OREGON STATE ENGINEER
UTAH	MONTHLY (JAN.-JUNE)	SALT LAKE CITY, UTAH	UTAH STATE ENGINEER
WASHINGTON	MONTHLY (FEB.-JUNE)	SPOKANE, WASHINGTON	WN. STATE DEPT. OF CONSERVATION
WYOMING	MONTHLY (FEB.-JUNE)	CASPER, WYOMING	WYOMING STATE ENGINEER

PUBLISHED BY OTHER AGENCIES

<u>REPORTS</u>	<u>ISSUED</u>	<u>AGENCY</u>
BRITISH COLUMBIA	MONTHLY (FEB.-JUNE)	WATER RESOURCES SERVICE, DEPT. OF LANDS, FOREST AND WATER RESOURCES, PARLIAMENT BLDG., VICTORIA, B.C., CANADA
CALIFORNIA	MONTHLY (FEB.-MAY)	CALIF. DEPT. OF WATER RESOURCES, P.O. Box 388, SACRAMENTO, CALIF.

WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
UTAH

JANUARY 1, 1965

Report prepared by

GREGORY L. PEARSON - GARRY DINSDALE

and

Patricia Paramore

SOIL CONSERVATION SERVICE

SNOW SURVEY SECTION

FEDERAL BLDG., ROOM 4012

SALT LAKE CITY UTAH 84111

Issued by

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STATE ENGINEER
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SALT LAKE CITY, UTAH

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STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
SALT LAKE CITY, UTAH

DR. D.W. THORNE

DIRECTOR
UTAH AGRICULTURAL
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LOGAN, UTAH

INDEX TO UTAH AND BEAR RIVER BASIN

NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.
GREAT BASIN DRAINAGE						
UPPER BEAR RIVER (above Harer, Idaho)						
10011	W	Big Park	7	27N	117W	8700
10016	W	Burts-Miller Ranch	19	3N	117W	7900
1007	W	CCC Camp x	9	29N	118W	7500
1007	W	Hayden Fork	1	1S	9E	9300
10012	W	Kelly Ranger Station	13	26N	118W	8200
11012P	W	Monte Cristo R.S.	4	8N	4E	8960
10010	W	Piney LaBarge x	19	29N	114W	8820
1006	W	Poison Meadows x	29	30N	116W	8500
1008P	W	Salt River Summit x	32	29N	118W	7900
1017P	U	Stillwater Camp	32	2N	10E	8550
LOWER BEAR RIVER (below Harer, Idaho)						
11014M	U	Beaver Creek-Sunk Creek	22	8N	3E	7150
11011	I	Christensen Ranch	27	13S	41E	5600
11012	I	Cub River Ranger Station	5	15S	41E	5400
11014a	I	Dry Basin	30	13S	42E	7900
11013MP	I	Dry Bread Pond	19	8W	4E	8230
1204	I	Dry Creek Flat	31	13S	37E	6350
1106	I	Emigrant Summit	21	12S	42E	7350
1107	I	Emigration Canyon (mouth)	24	12S	42E	6500
1108M	I	Franklin Basin	1	16S	41E	8000
1107MP	I	Garden City Summit	35	14N	4E	7600
11015a	I	Horseshoe Basin	31	13S	42E	8000
1101MP	I	Klondike Narrows	10	14N	3E	7400
11013	I	Liberty Springs	7	13S	42E	8420
11026	I	Little Bear (lower)	15	8N	1E	5800
11025P	U	Little Bear (upper)	22	8N	1E	6550
1102P	U	Monte Cristo R.S.	3	8N	4E	8960
1106	U	Mt. Logan	3	11N	2E	9000
1104	U	Oxford Mountain	32	13S	37E	7225
1105	I	Slug Creek Divide	15	10S	44E	7070
1104	U	Spring Hollow (lower)	26	12N	2E	8000
1105	U	Spring Hollow (upper)	35	12N	2E	8500
11027	U	Steep Hollow #1	7	14N	3E	7700
11028	U	Steep Hollow #2	9	14N	3E	7700
1109	I	Strawberry Creek	9	13S	41E	5800
11010	I	Strawberry Mink Divide	14	13S	41E	4800
11013M	U	Tony Grove Ranger Station	11	13N	3E	6250
1104P	I	Willow Flat	2	15S	41E	6100
OGDEN RIVER						
11014M	U	Beaver Creek-Sunk Creek	22	8N	3E	7150
1108	U	Ben Leonard Peak	3	7N	1E	8000
1109P	U	Ben Leonard (lower)	1	7N	1W	5850
11013MP	U	Dry Bread Pond	19	8W	4E	8230
1102P	U	Monte Cristo R.S.	3	8N	4E	8960
11010	U	Mt. Ogden	3	5N	1E	8600
11015P	U	Sagebrush Flat	21	7N	3E	6300
1101P	U	Snow Basin	32	6N	1E	6420
WEBER RIVER						
11024	U	Beaver Creek R.S.	28	2S	7E	7500
1101	U	Chalk Creek #1	4	1N	8E	9100
1102MP	U	Chalk Creek #2	17 & 20	2N	8E	8000
11013M	U	Chalk Creek #3	7	2N	8E	7500
11012P	U	Farmington Canyon (lower) x	14	3N	1E	6950
11011	U	Farmington Canyon (upper) x	26	3N	1E	8000
11014	U	Lamb's Canyon x	19	1S	3E	6600
11015P	U	Parley's Canyon Summit	9 & 10	1S	3E	7600
1106	U	Reddon Mine (lower)	1	2S	6E	8500
1105	U	Reddon Mine (upper)	1	2S	6E	9000
11016P	U	Silver Lake (Brighton) x	35	2S	3E	8725
1107P	U	Smith & Morehouse	25	1N	7E	7600
1018P	U	Trial Lake x	5	2S	9E	9800
PROVO RIVER & UTAH LAKE						
11020	U	Camp Altamont	29	4S	3E	7300
11021	U	Clear Creek Ridge #1	18	11S	6E	9200
11022P	U	Clear Creek Ridge #2	9	11S	6E	8000
11023	U	Clear Creek Ridge #3	27	10S	6E	6600
11024MP	U	Daniels-Strawberry Summit	20	2S	12W	8000
11017P	U	Dutchman R.S.	37	3S	3E	7960
1107P	U	East Portal	35	7S	6E	7560
11022P	U	Hobbs Creek Summit	20	7S	5E	7420
11031	U	Packard Canyon	21	7S	5E	6400
1101P	U	Payson R.S.	30	10S	3E	8050
1102	U	Rock Bridge	14	10S	2E	6750
11025P	U	Seapstone R.S.	9	4S	8E	7800
11019	U	South Fork R.S.	24	4S	2E	6100
1108	U	Strawberry Divide	31 & 35	7S	6E	8000
11018	U	Timpanogos Cave Camp	27	4S	2E	5500
11021P	U	Timpanogos Divide	33	4S	3E	8140
1008P	U	Trial Lake	5	2S	9E	9800
JORDAN RIVER & GREAT SALT LAKE						
1202	U	Bevan's Cabin	24	4S	4W	6450
1102P	U	Farmington Canyon (lower)	14	3N	1E	6950
11011	U	Farmington Canyon (upper)	26	3N	1E	8000
UPPER GREEN RIVER IN UTAH (above Duchesne River)						
9111a	U	Ashley Twin Lakes	20	1S	19E	10500
10121P	U	Black's Fork G.S. -East Fork	25	2N	12E	9300
10122P	U	Black's Fork Junction	33	3N	12E	8925
10123a	U	Buck Pasture	14	1N	11E	9700
1014P	U	Hedwita G.S.	33	3N	13E	9500
918	U	Hickerson Park	24	2N	17E	9100
101	U	Hole-in-the-Rock	13	2N	15E	9150
103	U	Hole-in-the-Rock G.S.	32	3N	16E	8300
912	U	King's Cabin (lower)	23 & 26	1S	21E	8790
911P	U	King's Cabin (upper)	22	1S	21E	8790
1012	U	Middle Beaver Creek	31	3N	16E	8550
917P	U	Spirit Lake	10	1N	17E	10300
10120a	U	Steel Creek Park	17	2N	13E	9900
9112a	U	Windy Park	1	1S	20E	9400
DUCHESE RIVER						
10127a	U	Atwood Basin	21	1S	15E	10250
1019	U	Brown Duck Lake	2	2N	6W	10300
919a	U	Chepeta-Whiterocks Lakes	3	1S	17E	10300
11032MP	U	Current Creek	31	1S	10W	7800
11023MP	U	Daniel's-Strawberry Summit x	20	2S	12W	8000
1107P	U	East Portal x	35	7S	6E	7560
10126a	U	Five Point Lake	28	4N	5W	11000
1001P	U	Indian Canyon	2	11S	10E	9100
10119	U	Jackson Park	23	3N	4W	11300
COLUMBIA RIVER DRAINAGE						
RAFT RIVER						
1302	I	Glear Creek Meadows	26	14N	14W	7050
1301	I	One Mile Summit	19	14N	14W	7330
1303a	I	ViPont	17	14W	17W	7670
SOUTHEASTERN UTAH DRAINAGES						
901P	U	Buckboard Flat	36	33S	22E	9000
902P	U	Camp Jackson	22	34S	22E	5600
911	U	LaSal Mountain	3	27S	22E	5800
912P	U	LaSal Mountain (upper)	5	27S	24E	9400
VIRGIN RIVER						
1201P	U	Cedar Breaks x	2	37S	9W	11390
1204P	U	Duck Creek R.S. x	11	38S	85W	8560
1205	U	Harris Flat x	24	38S	7W	7700
1206	U	Long Valley Junction	22	38S	4W	7500
1204M	U	Midway Valley x	26	37S	9W	9800
1203MP	U	Webster Flat	20	37S	9W	9200
FREMONT RIVER						
1114P	U	Black's Flat-U.M. Greek	33	24S	3E	9250
1115	U	Donkey Reservoir	9	30S	4E	9800
1113	U	Fish Lake	35	26S	1E	8700
1116	U	Johnson Valley	24	25S	2E	9250
ESCALANTE RIVER						
11M	U	Widsoe-Escalante Summit	22	34S	1W	9500
11M2	U	Widsoe-Escalante #2	22	34S	1W	9500
11M3P	U	Widsoe-Escalante #3	22	34S	1W	9500
SAN RAFAEL RIVER						
11K31P	U	Buck Flat	23	19S	4E	9400
11K5	U	Gooseberry Reservoir	25	12S	7E	8720
11K28P	U	Huntington-Horseshoe	12	14S	5E	9200
11K38	U	Red Pine Ridge	3	16S	6E	9600
11K9	U	Rush Pond	24	19S	4E	10090
11K27P	U	Sealey Creek R.S.	25	17S	4E	7950
11K26	U	Stuart R.S.	8 & 9	15S	7E	5900
11K29	U	Swatchback	14	14S	6E	8600
11K29	U	Upper Joe's Valley	21	16S	8E	8000
11K32	U	Wragley Creek	27	19S	5E	9030
MUDDY RIVER						
11K14	U	Black's Fork	34	20S	4E	7800
11K15	U	Dill's Camp	27	20S	4E	9200
FREMONT RIVER						
1114P	U	Black's Flat-U.M. Greek	33	24S	3E	9250
1115	U	Donkey Reservoir	9	30S	4E	9800
1113	U	Fish Lake	35	26S	1E	8700
1116	U	Johnson Valley	24	25S	2E	9250
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11M	U	Widsoe-Escalante Summit	22	34S	1W	9500
11M2	U	Widsoe-Escalante #2	22	34S	1W	9500
11M3P	U	Widsoe-Escalante #3	22	34S	1W	9500
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1201P	U	Cedar Breaks x	2	37S	9W	11390
1204P	U	Duck Creek R.S. x	11	38S	85W	8560
1205	U	Harris Flat x	24	38S	7W	7700
1206	U	Long Valley Junction	22	38S	4W	7500
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SOUTHEASTERN UTAH DRAINAGES						
901P	U	Buckboard Flat	36	33S	22E	9000
902P	U	Camp Jackson	22	34S	22E	5600
911	U	LaSal Mountain	3	27S	22E	5800
912P	U	LaSal Mountain (upper)	5	27S	24E	9400
COLUMBIA RIVER DRAINAGE						
RAFT RIVER						
1302	I	Glear Creek Meadows	26	14N	14W	7050
1301	I	One Mile Summit	19	14N	14W	7330
1303a	I	ViPont	17	14W	17W	7670
LEGEND						
Numbering system (example)						
SNOW COURSE ONLY						
10J7P		SNOW COURSE AND PRECIPITATION GAGE				
10J7M		SNOW COURSE AND SOIL MOISTURE STATION				
10J7A		SNOW COURSE AND AERIAL MARKER				
10J7MP		SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER				
10J7MA		SNOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE				
10J7M		SOIL MOISTURE STATION ONLY				
10J7P		AERIAL MARKER ONLY				
10J7P		STORAGE PRECIPITATION GAGE ONLY				
10J7P		ADJACENT DRAINAGE				

WATER SUPPLY OUTLOOK

as of

JANUARY 5, 1965

* * * * *
* The outlook for next summer's water supply is *
* now good to excellent for most of the state. *
* Forecasts of the April-September streamflow *
* range from about 115% to 175% of the 1948-62 *
* average, except on the East Fork Sevier and *
* Escalante rivers where 80% is expected. *
* * * * *

Record to near record snowfall during December on the mountain watersheds of central and northern Utah built up the snowpack until it now is about one and one half to over twice its usual amount for the first of January.

In southwestern Utah the snowpack is also above average - from about 125% to 190%, except on the East Fork Sevier and Escalante rivers where it is 19% below average.

Nearly three fourths of the 54 snow courses measured this month now show water contents which are between their February 1st and March 1st averages.

In general, the snowpack in central and northern Utah is proportionately much greater at the higher elevations than at lower levels. At the lowest elevations the snowpack falls below average, due to the excessive snowmelt from the warm temperatures and rain during December.

Although streams in southwestern areas are not expected to yield as much as those in central and northern areas, the outlook for them is still good. Forecasts range from about 15% to 30% above average for the Virgin and main Sevier rivers, and for the smaller streams near Cedar City, Beaver and Fillmore.

Moving farther north, the tributaries of the San Pitch, San Rafael and Price rivers are expected to yield from 140% to 175% of average streamflow. This is about the same or a little more water than was measured in 1962.

In the Uintah Basin, the snowpack is particularly heavy in the west, indicating a streamflow forecast of 160% for the Strawberry river at Duchesne and 145% for the Duchesne at Tabiona. Moving eastward, forecasts decrease to about 125% near Vernal.

WATER SUPPLY OUTLOOK (continued)

Streams from the Spanish Fork river northward to the Idaho line should yield between 120% and 160% of average. Exceptions are the Cottonwood Creeks at Salt Lake and the inflow to Utah Lake which are expected to be 10% to 15% above average.

Highest forecasts in this northern area are for Chalk Creek near Coalville, East Canyon Creek near Morgan, Parleys Creek near Salt Lake and the Weber river at Coalville. These streams are expected to produce from 150% to 160% of average.

Streamflow forecasts are made by combining present snowpack and soil moisture conditions and assuming that average weather will prevail for the balance of the season. Since in the average year there is still 60% to 65% of the snowpack yet to come, forecasts can change considerably - either up or down - as the season progresses.

Because of the present heavy snowpack, even if quite a dry spell is experienced, water supplies next summer should still be adequate for most of the state. On the other hand, since many of the streams are already expected to be running high enough that they could cause damage during the main snowmelt period, if above average snowfall occurs for the balance of the season, the high water threat will become critically dangerous.

RESERVOIR STORAGE (1,000 Ac. Ft.)

BASIN or STREAM	RESERVOIR	USABLE CAPACITY	MEASURED (FIRST OF MONTH)		
			THIS YEAR	LAST YEAR	AVERAGE ^a
GREAT BASIN					
<u>Bear River</u>	Bear Lake	1421.0	881.1	700.0	882.4
	Woodruff Narrows	26.5	No Report	13.0	- -
<u>Little Bear</u>	Hyrum	15.3	8.2	12.2	9.1
	Porcupine	11.3	5.0c	- -	- -
<u>Ogden</u>	Pineview	110.0	61.4	56.1	8.5
<u>Weber</u>	Rockport	59.1	41.2	26.1	15.0**
	Echo	73.9	42.0	30.5	23.9
	East Canyon	28.7	0.0	17.9	11.2
<u>Provo</u>	Deer Creek	149.7	115.2	100.9	91.8
<u>Spanish Fork</u>	Strawberry	270.0	59.5	51.1	129.3
<u>Utah Lake</u>	Utah Lake (b)	1149.0	355.9	214.4	448.0
<u>Sevier River</u>	Otter Creek	52.5	11.4	10.6	19.7
	Piute	74.0	16.9	11.2	23.9
	Sevier Bridge	236.0	31.8	29.4	79.5
<u>Beaver River</u>	Rocky Ford	23.3	5.4c	4.5	9.1
COLORADO RIVER DRAINAGE					
<u>Ashley Creek</u>	Steinaker	33.3	12.6	6.9	- -
<u>Lake Fork</u>	Moon Lake	35.8	8.2	17.4	11.3
<u>Price River</u>	Scofield	65.8	10.8	9.6	17.0
<u>Green</u>	Flaming Gorge	3789.0*	1,137.6	924.4	- -
<u>San Juan</u>	Navajo	1709.0*	391.9	343.2	- -
<u>Colorado</u>	Lake Powell	27000.0*	6,224.0	2968.0	- -

All data contained in this table supplied by the U.S. Geological Survey.

* - Total capacity reported

** - 5 year average

All data contained in this table supplied by the U.S. Geological Survey.

(a) 1948-62 average. (b) Active capacity taken at 3.1 feet above compromise point. (c) Partly estimated. (d) Total capacity reported.

COMPARISON of SNOW COVER

RIVER BASIN or TRIBUTARY WATERSHED	NO. of COURSES AVERAGE	THIS YEARS SNOW WATER EXPRESSED AS PERCENT OF :	
		LAST YEAR	AVERAGE *

GREAT BASIN

Smith's Fork - Bear River(Wyo)	2	225	184
Logan River	3	299	167
Ogden River	2	210	128
Weber River above Echo Dam	6	473	204
East Canyon Creek	3	372	183
Farmington Creek	2	421	204
Salt Lake Area	4	387	182
Tooele Area	1	215	165
American Fork River	2	280	150
Provo River above Vivian Park	7	499	199
Strawberry Reservoir Valley	3	766	182
Payson Creek	2	262	183
Sevier River above Hatch	3	384	191
East Fork Sevier River	4	201	81
Clear Creek above Sevier	1	230	127
Salina Creek	2	267	220
San Pitch River	6	297	204
Coal Creek-Cedar City	3	254	146

COLORADO RIVER BASIN

Duchesne-Strawberry Rivers	6	728	204
Whiterocks - Uintah Rivers	3	500	181
Price River	6	547	218
San Rafael River	4	292	192
Escalante River	4	201	81
Virgin River	4	342	179

SNOW			CURRENT INFORMATION			PAST RECORD	
DRAINAGE BASIN and SNOW COURSE			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^a

GREAT BASIN DRAINAGE

UPPER BEAR RIVER (Above Harer, Idaho)

CCC Camp x	10G7	7500	12/30	38	8.8	4.0	5.1
Salt River Summit*	10G8	7900	12/30	50	12.4	5.4	6.4
Trial Lake*	10J8	9800	12/30	89	23.4	5.3	10.8*

LOWER BEAR RIVER (Below Harer, Idaho)

Garden City Summit	11H7	7600	12/29	50	14.4	5.2	8.1*
Klondike Narrows	11H1	7400	12/29	54	15.4	4.2	8.5*
Tony Grove R.S.	11H3	6250	12/29	26	6.8	2.7	4.8*

OGDEN RIVER

Ben Lomond Peak	11H8	8000	12/30	62	21.3	7.8	13.5*
Ben Lomond(lower)	11H9	5850	12/30	21	6.2	4.2	6.3*
Ben Lomond Trail	11H30	6000	12/30	25	8.2	4.5	- -
Cutler Creek	11H29	6780	12/30	48	16.3	6.0	- -

WEBER RIVER

Beaver Creek R.S.	11J24	7500	12/30	35	7.8	1.1	3.4*
Lamb's Canyon x	11J14	6600	12/28	48	10.0	3.0	5.4*
Parley's Canyon Smt.	11J15	7500	12/29	49	13.3	3.2	7.0*
Silver Lake x	11J16	8725	12/30	69	18.4	5.0	10.6
Smith & Morehouse	11J4	7600	12/28	43	10.8	1.9	4.7*
Trial Lake x	10J8	9800	12/30	89	23.4	5.3	10.8*

PROVO RIVER & UTAH LAKE

Camp Altamont	11J20	7300	12/30	35	10.2	3.3	7.0
Daniels-Strawberry Smt.	11J23	8000	12/30	42	10.0	1.7	5.4
East Portal	11J7	7560	12/30	35	7.6	0.6	4.1
Payson R.S.	11K1	8050	12/29	46	11.2	3.6	5.9*
Rock Bridge	11K2	6750	12/29	36	7.2	3.4	4.1*
Soapstone R.S.	11J25	7800	12/30	52	12.8	1.6	5.2*
South Fork R. S.	11J19	6100	12/30	9	1.7	2.6	3.8
Strawberry Divide	11J8	8000	12/30	57	13.3	3.0	7.6
Timpanogos Cave Camp	11J18	5500	12/30	5	0.6	1.1	1.4
Timpanogos Divide	11J21	8140	12/30	58	16.5	6.6	10.7
Trial Lake	10J8	9800	12/30	89	23.4	5.3	10.8*

(a) 1948-62, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation; Water content estimated. * Estimated 1948-62, 15 year average.

SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^a

JORDAN RIVER & GREAT SALT LAKE

Farmington Canyon(l)	11J12	6950	12/30	46	13.6	3.8	8.0*
Farmington Canyon(u)	11J11	8000	12/30	67	21.3	4.4	9.0*
Lamb's Canyon	11J14	6600	12/29	48	10.0	3.0	5.4*
Middle Canyon	12J3	7000	12/30	31	8.4	3.9	5.1*
Mill D South Fork	11J10	7400	12/30	51	13.4	3.1	7.5*
Parley's Canyon Smt.x	11J15	7500	12/29	49	13.3	3.2	7.0*
Silver Lake	11J16	8725	12/30	69	18.4	5.0	10.6

UPPER SEVIER RIVER
(South of Richfield, Utah)

Bryce Canyon	12M8	8000	12/28	10	2.3	Trace	2.2*
Duck Creek R.S.	12M4	8560	12/30	32	7.4	1.4	4.0*
Harris Flat	12M5	7700	12/30	19	4.9	Trace	2.0*
Kimberly Mine	12L6	8900	12/28	32	7.6	3.3	6.0*
Long Valley Jct.x	12M6	7500	12/30	4	0.4	0.0	1.0*
Midway Valley	12M2	9800	12/30	38	10.0	4.2	7.0*
Widtsoe-Escalante Smt.	11M1	9500	12/29	16	3.2	1.1	3.4
Widtsoe-Escalante #2	11M2	9500	12/29	18	3.2	2.2	4.8*
Widtsoe-Escalante #3	11M3	9500	12/29	22	4.0	2.4	7.0*

LOWER SEVIER RIVER
(Including San Pitch River)

Beaver Dams	11K13	8000	1/2	34	8.8	2.8	3.9*
Farnsworth Lake	11L1	9900	1/4	41	11.9	4.2	6.0*
G.B.R.C. Headquarters	11K11	8700	12/31	45	12.6	4.2	5.5*
G.B.R.C. Meadows	11K10	10000	12/31	63	16.8	5.7	9.0*
Gooseberry R.S.	11L2	8400	1/4	29	8.0	3.2	3.3*
Gooseberry Reservoir x	11K4	8700	12/29	47	12.3	4.6	6.8*
Mammoth R.S.-Ctnwd.Crk.	11K3	8800	12/29	50	12.0	4.6	7.0*
Mt. Baldy R.S.	11K12	9500	1/2	60	16.6	4.8	7.2*
Shingle Mill	12L11	6200	12/29	12	2.8	2.9	- -

COAL CREEK

Midway Valley x	12M2	9800	12/30	38	10.0	4.2	7.0*
Urie Flat	12M10	8450	12/30	13	2.9	1.1	1.9*
Webster Flat x	12M3	9200	12/30	28	6.5	2.5	4.5*

(a) 1948-62, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation: Water content estimated. * Estimated 1948-62, 15 year average.

SNOW			CURRENT INFORMATION			PAST RECORD	
DRAINAGE BASIN and SNOW COURSE			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^a

COLORADO RIVER DRAINAGE

DUCHESNE RIVER

Daniels-Strawberry Smt.	11J23	8000	12/30	42	10.0	1.7	5.4
East Portal x	11J7	7560	12/30	35	7.6	0.6	4.1
Indian Canyon	10K1	9100	12/30	48	10.8	1.3	5.0
Julius Park	9J6	9800	12/30	47	8.8	2.5	5.6*
Mosby Mountain	9J5	9500	12/30	41	8.3	1.2	4.0*
Paradise Park	9J3	10100	12/30	45	9.6	2.1	5.4*
Soapstone R.S. x	11J25	7800	12/30	52	12.8	1.6	5.2*
Strawberry Divide x	11J8	8000	12/30	57	13.3	3.0	7.6
Trial Lake x	10J8	9800	12/30	89	23.4	5.3	10.8*

PRICE RIVER

Dry Valley Divide	11K8	7800	12/29	39	8.2	1.1	3.0
Gooseberry Reservoir	11K4	8700	12/29	47	12.3	4.6	6.8*
Indian Canyon x	10K1	9100	12/30	48	10.8	1.3	5.0
Jones Ranch	11K7	7600	12/29	25	4.8	Trace	2.2
Mammoth R.S.-Ctnwd.Crk.x	11K3	8800	12/29	50	12.0	4.6	7.0*
Mud Creek	11K33	8300	12/29	57	12.0	1.9	4.8*

SAN RAFAEL RIVER

G.B.R.C. Meadows x	11K10	10000	12/31	63	16.8	5.7	9.0*
Gooseberry Reservoir x	11K4	8700	12/29	47	12.3	4.6	6.8*
Mammoth R.S.-Ctnwd.Crk.x	11K3	8800	12/29	50	12.0	4.6	7.0*
Mt. Baldy R.S. x	11K12	9500	1/2	60	16.6	4.8	7.2*

FREMONT RIVER

Farnsworth Lake x	11L1	9900	1/4	41	11.9	4.2	6.0*
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MUDDY RIVER

Mt. Baldy R.S. x	11K12	9500	1/2	60	16.6	4.8	7.2*
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ESCALANTE RIVER

Widtsoe-Escalante Smt.	11M1	9500	12/29	16	3.2	1.1	3.4
Widtsoe-Escalante #2	11M2	9500	12/29	18	3.2	2.2	4.8*
Widtsoe-Escalante #3	11M3	9500	12/29	22	4.0	2.4	7.0*

VIRGIN RIVER

Duck Creek R.S.	12M4	8560	12/30	32	7.4	1.4	4.0*
Harris Flat x	12M5	7700	12/30	19	4.9	Trace	2.0*
Long Valley Jct.	12M6	7500	12/30	4	0.4	0.0	1.0*
Midway Valley x	12M2	9400	12/30	38	10.0	4.2	7.0*
Webster Flat	12M3	9200	12/30	28	6.5	2.5	4.5*

(a) 1948-62, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation: Water content estimated. * Estimated 1948-62, 15 year average.

PRECIPITATION DATA (Inches)

DRAINAGE BASIN AND RAIN GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. 10/1 TO DATE		
		DATE OF READING	MONTH'S PRECIPITATION	1948-62 AVERAGE	THIS YEAR	1948-62 AVERAGE	PERCENT OF AVERAGE

a

GREAT BASIN DRAINAGE

UPPER BEAR RIVER (Above Harer, Idaho)

Salt River Summit	7900	12/30	9.80	3.20	14.05	7.75	181
Trial Lake*	9800	12/30	11.75	5.05	19.34	11.05	175

LOWER BEAR RIVER (Below Harer, Idaho)

Garden City Summit	7600	12/31	13.08	3.40	15.65	8.25	190
Klondike Narrows	7400	12/29	- -	- -	19.92	10.20	195
Tony Grove R.S. (SCS)	6250	12/29	13.12	- -	15.74	- -	--

OGDEN RIVER

Ben Lomond(lower)	5850	12/30	11.03	3.80	19.21	10.60	181
Ben Lomond Trail	6000	12/30	11.14	4.00	19.57	11.13	176
Causey Dam	5500	12/30	7.40	- -	11.10	- -	- -

WEBER RIVER

Farmington Guard Sta.(1)	7500	1/4	9.04	5.40	19.59	13.40	146
Farmington Rice (1)	7000	1/4	8.25	4.90a	17.62	11.99a	147
Mt. Dell Dam(2)*	5500	12/31	7.53	2.49a	12.52	6.11a	205
Parley's Canyon Smt.	7500	12/29	10.98	4.05	16.32	9.45	173
Silver Lake(Brighton)*(2)	8725	12/31	13.63	5.67a	21.02	12.98a	162
Smith & Morehouse	7600	12/28	- -	- -	13.74	8.30	166
Trial Lake*	9800	12/30	11.75	5.05	19.34	11.05	175

PROVO RIVER & UTAH LAKE

Daniels-Strawberry Smt.	8000	12/30	7.99	3.50	13.72	8.35	164
East Portal Ridge	7800	12/30	8.50	- -	13.00	- -	- -
Payson R.S.	8050	12/29	- -	- -	12.32	8.15	151
Soapstone R.S.	7800	12/30	7.80	3.15	12.74	7.35	173
Strawberry Res.-E.Portal	7606	12/30	5.45	2.06a	8.50	4.98a	171
Timpanogos Divide	8200	12/30	8.90	5.09a	16.85	11.73a	144
Trial Lake	9800	12/30	11.75	5.05	19.34	11.05	175

JORDAN RIVER & TOOELE VALLEY

Middle Canyon	7000	12/30	- -	- -	12.84	8.20	157
Mt. Dell Dam(2)	5500	12/31	7.53	2.49a	12.52	6.11a	205
Parley's Canyon Smt.	7500	12/29	10.98	4.05	16.32	9.45	173
Silver Lake(Brighton) (2)	8725	12/31	13.63	5.67a	21.02	12.98a	162

(1) Data supplied by U.S.Forest Service
* Adjacent Drainage

(2) Data supplied by USWB
a All values estimated except
those where symbol "a" occurs.

(1) Data supplied by U.S. Forest Service. (2) Data supplied by U.S. Weather Bureau. a - all values estimated except those where symbol "a" occurs. *Adjacent drainage.

PRECIPITATION DATA (Inches)

DRAINAGE BASIN AND RAIN GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. 10/1 TO DATE		
		DATE OF READING	MONTH'S PRECIPITATION	1948 - 62 AVERAGE	THIS YEAR	1948 - 62 AVERAGE	PERCENT OF AVERAGE

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SEVIER RIVER ABOVE RICHFIELD

Duck Creek R.S.	8560	12/30	4.29	2.90	7.88	6.90	114
Kimberly Mine	8900	12/28	4.49	3.10	9.19	7.85	117
Webster Flat*	9200	12/30	4.10	3.00	7.88	7.00	113
Widtsoe-Escalante #3	9500	12/29	2.13	2.30	4.56	6.25	73
Widtsoe-R. S.	7600	12/29	0.55	0.93a	1.29	2.71a	48

SEVIER RIVER BELOW RICHFIELD (Including San Pitch River)

Beaver Dams	8000	1/2	- -	- -	10.10	6.35	159
Farnsworth Lake	9900	1/4	6.91	3.15	11.95	8.00	149
G.B.R.C. Headquarters(1)	8700	12/31	6.75	3.03	12.38	7.76	160
G.B.R.C. Meadows(1)	10000	12/31	7.95	3.36	14.17	8.75	162
G.B.R.C. Oaks(1)	7655	12/31	4.62	2.24	8.39	5.59	150
Gooseberry R.S.(1)	7800	1/4	4.76	2.40	8.89	5.80	153
Gooseberry Reservoir*	8700	12/29	7.35	3.35	12.78	8.15	157
Mammoth R.S. #2*	8600	12/29	8.03	3.35	13.33	8.10	164
Mt. Baldy	9500	1/2	- -	- -	12.30	- -	- -
Shingle Mill	6200	12/29	3.55	2.55	8.00	6.50	123

BEAVER RIVER

Beaver Canyon P.H.(2)	7275	12/31	2.43	1.41a	4.18	3.80a	110
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COAL CREEK

Webster Flat*	9200	12/30	4.10	3.00	7.88	7.00	113
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COLORADO RIVER DRAINAGE

DUCHESNE RIVER

Daniels-Strawberry Smt.*	8000	12/30	7.99	3.50	13.72	8.35	164
East Portal Ridge*	7800	12/30	8.50	- -	13.00	- -	- -
Indian Canyon	9100	12/30	- -	- -	10.32	6.80	152
Julius Park	9800	12/30	- -	- -	8.51	7.05	121
Moon Lake	8150	1/3	4.65	1.49	7.10	4.25	167
Paradise Park	10100	12/30	- -	- -	9.15	7.55	121
Soapstone R.S.*	7800	12/30	7.80	3.15	12.74	7.35	173
Strawberry Res.-E.Portal*	7606	12/30	5.45	2.06a	8.50	4.98a	171
Trial Lake*	9800	12/30	11.75	5.05	19.34	11.05	175

(1) Data supplied by U.S.Forest Service
* Adjacent Drainage

(2) Data supplied by U.S.Weather Bur.
a All values estimated except
those where symbol "a" occurs.

PRECIPITATION DATA (Inches)

DRAINAGE BASIN AND RAIN GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. 10/1 TO DATE		
		DATE OF READING	MONTH'S PRECIPITATION	1948 - 62 AVERAGE	THIS YEAR	1948 - 62 AVERAGE	PERCENT OF AVERAGE

a

a

PRICE RIVER

Gooseberry Reservoir	8700	12/29	7.35	3.35	12.78	8.15	157
Indian Canyon	9100	12/30	- -	- -	10.32	6.80	152
Mammoth R.S. #2	8600	12/29	8.03	3.35	13.33	8.10	164
Mud Creek	8300	12/29	7.65	3.15	12.80	7.15	179

SAN RAFAEL RIVER

G.B.R.C. Meadows*(1)	10000	12/31	7.95	3.36a	14.17	8.75a	162
Gooseberry Reservoir*	8700	12/29	7.35	3.35	12.78	8.15	157

MUDDY RIVER

Mt. Baldy R.S.*	9500	1/2	- -	- -	12.30	- -	- -
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FREMONT & ESCALANTE RIVERS

Farnsworth Lake*	9900	1/4	6.91	3.15	11.95	8.00	149
Widtsoe-Escalante #3	9500	12/29	2.13	2.30	4.56	6.25	73

VIRGIN RIVER

Duck Creek R.S.	8560	12/30	4.29	2.90	7.88	6.90	114
Webster Flat	9200	12/30	4.10	3.00	7.88	7.00	113

(1) Data supplied by U.S. Forest Service
* Adjacent Drainage

(2) Data supplied by U.S. Weather Bur.
a All values estimated except
those where symbol "a" occurs.

Agencies Cooperating in Utah Snow Surveys

U. S. GOVERNMENT AGENCIES

U. S. Department of Agriculture
Soil Conservation Service
Forest Service
U. S. Department of Commerce
Weather Bureau
U. S. Department of Interior
Bureau of Reclamation
Geological Survey
National Park Service

STATE AGENCIES

Utah Agricultural Experiment Station
Utah Fish and Game Department
Utah State Engineer
Bear River Commissioner
Price River Commissioner
Provo River Commissioner
Sevier River Commissioners
Spanish Fork River Commissioner
Utah Lake and Jordan River Commissioner
Utah Water and Power Board

MUNICIPALITIES

Manti
Salt Lake City

ORGANIZED PUBLIC AGENCIES

Beaver River Water Users Association
Board of Canal Presidents - Jordan River
Emery Canal and Reservoir Company
Moon Lake Water Users Association
Ogden River Water Users Association
Provo River Water Users Association
Strawberry Water Users Association
Sevier River Water Users Association

PRIVATE AGENCIES

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with the Snow Survey"*